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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,777	09/18/2000	Darren Kerr	112025-0197	4077

24267 7590 02/02/2004  
CESARI AND MCKENNA, LLP  
88 BLACK FALCON AVENUE  
BOSTON, MA 02210

EXAMINER

STEVENS, ROBERTA A

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/663,777

Applicant(s)

KERR ET AL.

Examiner

Roberta A Stevens

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1- 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Sindhu (U.S. 6493347 B2).

3. Regarding claim 1, Sindhu teaches (abstract and figures 4-11A) a method for striping packets across pipelines of processing engine within a network switch, the processing engine having a plurality of processors arrayed as pipeline rows and columns embedded between input output buffer, each pipeline row including a context memory, comprising: organizing the context memory as a plurality of window buffers of a defined size; apportioning each packet into contexts corresponding to the defined size associated with each window buffer; and correlating each context with a relative position within the packet to thereby facilitate reassembly of the packet at the output buffer, while obviating out-of-order issues involving the contexts of the packet.

4. Regarding claims 2 and 12, Partridge teaches (abstract and figures 4-11A) organizing the processors and context memory of each pipeline row as a cluster.

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5. Regarding claims 3 and 17, Partridge teaches (abstract) segmenting the packets into fixed sized contexts at the input buffer; sequentially passing the contexts to the clusters; and storing the fixed sized contexts in appropriate window buffers of the context memories.
6. Regarding claims 4, 13 and 18, Partridge teaches (abstract and figures 4-11A) providing a program counter entry point function to indicate the relative position of each context within the packet.
7. Regarding claims 5 and 14, Partridge teaches (abstract and figures 4-11A) the relative position comprises one of a beginning, middle and end context of the packet.
8. Regarding claim 6, Partridge teaches (abstract and figures 4-11A) processing the context at a source processor of the cluster; communicating an intermediate result relating to processing of the context to a destination processor of a neighboring cluster.
9. Regarding claims 7 and 15, Partridge teaches (abstract and figures 4-11A) providing an intercolumn communication mechanism configured to forward the intermediate result from the source processor.
10. Regarding claims 8 and 19, Partridge teaches (abstract and figures 4-11A) changing the size of a fixed sized context at the context memory of a cluster.
11. Regarding claims 9 and 20, Partridge teaches (abstract and figures 4-11A) deleting a portion of the fixed sized context stored in the window buffer; and substituting the deleted portion of the context with information stored at another location of the context memory.
12. Regarding claim 10, Partridge teaches (abstract and figures 4-11A) the substituted portion is not larger than or smaller than the deleted portion

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13. Regarding claim 11, Partridge teaches (abstract and figures 4-11A) a system for striping packets across pipelines of a processing engine within a network switch, the processing engine having a plurality of processors arrayed as pipeline rows and columns embedded between input and output buffers, comprising: a context memory within each pipeline row, organized as a plurality of window buffers of a defined size; a segmentation unit adapted to apportion each packet into contexts for processing, corresponding to the defined size associated with each window buffer; and a mapping mechanism configured to correlate each context with a relative position within the packet to thereby facilitate reassembly of the packet at the output buffer while obviating out of order issues involving the context of the packet.

14. Regarding claim 16, Partridge teaches (abstract and figures 4-11A) a computer readable medium containing program instructions for striping packets across pipelines of processing engine within a network switch, the processing engine having a plurality of processors arrayed as pipeline rows and columns embedded between input output buffer, each pipeline row including a context memory, comprising: organizing the context memory as a plurality of window buffers of a defined size; apportioning each packet into contexts corresponding to the defined size associated with each window buffer; and correlating each context with a relative position within the packet to thereby facilitate reassembly of the packet at the output buffer, while obviating out-of-order issues involving the contexts of the packet.

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***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McAuley (U.S. 5115436), Modelski (U.S. 6665755 B2) and Partridge (U.S. 6160819) are cited to show the state of the art.

16. Any inquiry concerning the communication or earlier communications from the examiner should be directed to Roberta Stevens whose telephone number is (703) 308-6607. The examiner can normally be reached on Monday through Friday from 9:00 am to 5:30 p.m.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor can be reached on (703) 308-6602.

18. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-3900.

19. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231 or faxed to: (703) 872-9306

For informal draft communications, please label "PROPOSED" or "DRAFT"

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA. Sixth Floor (Receptionist).

Roberta A. Stevens

Patent Examiner

01-23-04



STEVEN H. D. NGUYEN  
PRIMARY EXAMINER